# The Pan-Pacific Entomologist

Vol. XXXVII

January, 1961

No. 1

## A REVIEW OF THE PTEROPLATINI OF NORTH AND CENTRAL AMERICA (Coleoptera: Cerambycidae) E. GORTON LINSLEY<sup>1</sup>

University of California, Berkeley

The Pteroplatini are of special interest to naturalists because many of the species associate with lycids and bear a pronounced superficial resemblance to them in form and coloration. As a result, considerable convergence in color patterns has occurred, both among species of the same genus and among species of different genera, and identifications based upon published descriptions have frequently involved considerable uncertainty. Since no keys to the described genera or species of Mexico and Central America have been published, and no recent keys to any of the forms from north of Mexico, the following are offered in the hope that they will facilitate identification of the species and thus encourage field studies designed to clarify their ecological relationships.

## Key to Genera

1.	Pronotum not constricted, usually trapezoidal, as wide or nearly	
	as wide at base as elytra	2
_	Pronotum constricted, much narrower at base than elytra	.5
2(1).	Antennae with segments carinate, armed with short spines	.3
	Antennae without carinae or apical spines	4
3(2).	Elytra broad at base and gradually widened toward apex, their	
	greatest joint width about two-thirds of their length; prono-	
	tum with a foliaceous lateral marginDeltosom	a
—	Elytra narrow at base and usually flaring from near middle, their	
	greatest joint width only about one-half of their length;	
	pronotum with lateral margin rounded or obtusely elevated,	
	not foliaceous; antennae often with basal segments densely	
	hairy or penicillate-fimbriate beneath	ls
4(2).	Body flattened, elytra broadly explanate, flaring, quadricostate	
	Pteroplatidiu	s

<sup>&</sup>lt;sup>1</sup>This is one of a number of studies made possible by the National Science Foundation during the author's tenure as Miller Research Professor, University of California. Types of described species were kindly made available at the American Museum of Natural History, New York, by J. G. Rozen, Jr., at the British Museum (Natural History), London, by E. B. Britton, at the California Academy of Sciences, San Francisco, by E. S. Ross, at the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, by P. J. Darlington, at the Museum National d'Histoire Naturelle, Paris by Andre Villiers, and at the Naturhistoriska Riksmuseet, Stockholm, by E. Kjellander.

## THE PAN-PACIFIC ENTOMOLOGIST [VOL. XXXVII, NO. ]

Body cylindrical, elytra not flaring, tricostate......Parathetesis 5(1). Intermediate and posterior femora linear or gradually enlarged Intermediate and posterior femora pedunculate and abruptly clavate beyond middle; antennae short, first five segments filiform, penicillate-fimbriate or densely clothed with long hairs, sixth to tenth segments produced slightly at apex but 6(5). Scutellum not or scarcely longer than broad, rounded behind or obtusely triangular, apex not produced; body lyciform, pronotum and elytra flattened, the latter often expanded apically.......7 Scutellum elongate-triangular, apex acute, usually produced; body large, subcylindrical ......Parevander Antennae with some or all of the basal segments penicillatefimbriate, outer segments cylindrical.....Pteroplatus 8(7). Antennae about half as long as body in male, shorter in female, outer segments produced at their apices, serrate, eleventh segment appendiculate; elytra usually distinctly costate ...... Elytroleptus Antennae about as long as body in male, shorter in female, segments filiform or nearly so, eleventh segment not appendi-Genus DELTOSOMA Thomson

Deltosoma Thomson, 1864, Systema Cerambycidarum, p. 258; Lacordaire, 1869, Genera des Coléoptères, 9:163; Bates, 1880, Biologia Centrali-Americana, Coleoptera, 5:72.

Species in this genus of lyciform cerambycids are broader across the shoulder than those of related genera, and the pronotum has a broadly expanded foliaceous lateral margin. Two species are known from Central America as follows:

DELTOSOMA GUATEMALENSE Bates

Deltosoma guatemalense Bates, 1880, Biologia Centrali-Americana, Coleoptera, 5:72.

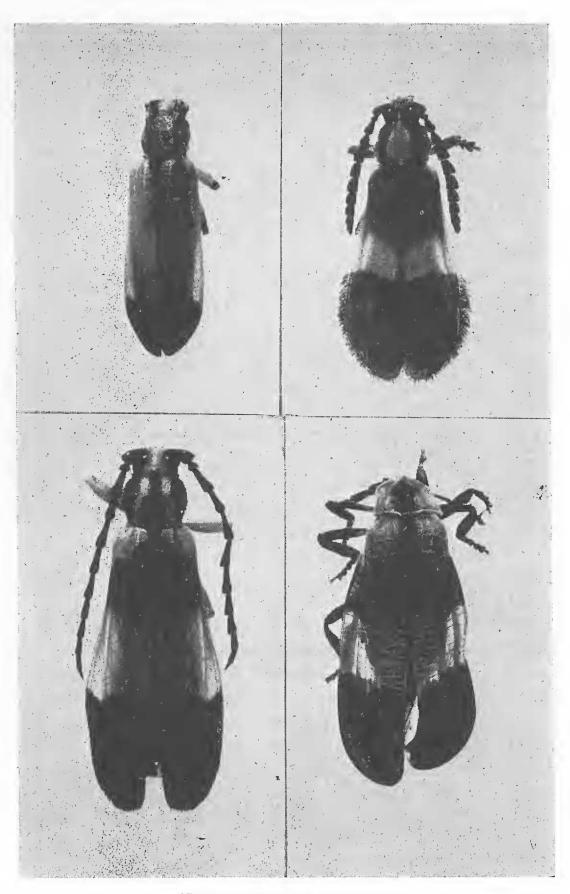
In this species the appendages are black, the pronotum is margined with tawny yellow, and the elytral humeri and a broad transverse median band are also tawny yellow. This in size (11– 17 mm.) and coloration closely suggesting the common Central American *Calopteron serratum* (Linnaeus). The type series is from San Geronimo, Guatemala.

DELTOSOMA FLAVIDUM Aurivillius

Deltosoma flavidum Aurivillius, 1925, Ark. Zool. 17A(12):9.

D. flavidum is golden ochraceous with the antennal flagellum black. The elytra are concolorous in the male type but in a female example from Summit, Panama Canal Zone, January 1947 (N. L.

-2



## EXPLANATION OF FIGURES

Fig. 1. (upper left): Elytroleptus dichromaticus Linsley, Q. Fig. 2. (upper right): Pteroplatidius octocostatus (Bates), Q. Fig. 3. (lower left): Elytroleptus grandis Linsley, Q. Fig. 4. (lower right): Calopteron sp. with which E. grandis was taken at Cuernavaca, Mexico. H. Krauss, U. S. National Museum) there is an ill-defined median piceous line between the suture and first costa, a shorter parallel line between sublateral costa and lateral margin, and a similar dark area on the epipleuron. This specimen also has somewhat piceous tarsi and vague dark areas at the sides of the thoracic sternum and abdomen. The antennae of the male are twelvesegmented and exceed the elytral apices by about four segments, those of the female are eleven-segmented and reach to the apical one-fourth of the elytra. Length 16 mm. The type locality is Lino, Panama.

Genus COSMOPLATIDIUS Gounelle

Cosmoplatus (Cosmoplatidius) Gounelle, 1911, Ann. Soc. Ent. France, 1911: 131.

The flattened, posteriorly expanded, costate elytra with the apices separately rounded distinguish this genus from *Cosmoplatus*. The antennae range from filiform with the second to sixth antennal segments sparsely ciliate beneath [*C. annulipes* (Blanchard), *C. simulans* (Bates)] to species in which the segments are densely fasciculate-fiml riate [*C. sellatus* (White), *C. ochraceus* Linsley], but in none do the hairs reach the proportionate length of those in the type species of *Cosmoplatus*. Only one species has thus far been found in Central America.

COSMOPLATIDIUS SELLATUS (White)

Pteroplatus sellatus White, 1853, Catal. Coleopt. British Mus., 7:82, pl. 3, fig. 3; Bates, 1880, Biologia Centrali-Americana, Coleoptera, 5:73.

Yellow, with a pair of longitudinal black bands on the head, a black marginal line and a sublateral longitudinal stripe on each side of the pronotum that coincides with the dark areas on the head, and the elytra usually with a broad black area over the apices and commonly with a transverse antemedian band in addition. The appendages and abdomen are black. However, a series of sixty examples from fruit-fly traps (e esumably baited with mangoes) at El Cermeno, Panama, April to October (J. Zetec) (U. S. National Museum), exhibit three distinct color patterns: (1) elytra almost entirely yellow, the apices being very narrowly black, (2) the apices broadly (apical one-fourth) black, and (3) the apices and an ante-median band black. Forty-eight males segregated almost evenly into the three groups, 16, 15, and 17; twelve females as follows: 1, 5, 6.

This species is known from southern Mexico, Guatemala, Honduras, Costa Rica, Nicaragua, and Panama. The fully devel-

oped color pattern suggests that of the lycid Calopteron serratum (Linnaeus), a common Central American species.

The following species, although not Central American, is described at this time because of its close relationship to C. sellatus (White).

## Cosmoplatidius ochraceus Linsley, new species

Male: Golden ochraceus, clothed with golden pubescence, mandibles rufo-piceous, antennal segments beginning with third becoming successively more piceous, second to sixth segments densely penicillate-fimbriate beneath, the hairs golden on second segment, predominantly golden on third segment, predominantly black on segments four to six. Head finely punctate above, more densely and less finely so in a depression behind upper lobe of eye, densely clothed with fine appressed golden pubescence which conceals the surface beneath, shining and subglabrous; antennae slightly longer than the body, segments three to ten carinate, third to seventh feebly bispinose, the spines longer and more distinct on segments eight to ten. Pronotum at base as wide as elytra, posterior angle lobed, surface finely punctate, more densely and less finely so in a vaguely darker longitudinal impression on each side of disk and on lateral margin, pubescence fine, appressed, golden, obscuring surface; prosternum finely punctate and pubescent, with coarser punctures superimposed at sides; mesosternum shining; metasternum dullish, finely densely punctate, pubescent. Elytra flaring from in front of middle but greatest width only about one-half their length, epipleurae vertical, continued posteriorly as a costiform ridge, a second costa nearer the suture finely densely punctate with coarser punctures superimposed, the latter mostly separated by two or more diameters, pubescence fine short, golden, with an intermixture of coarse suberect golden setae arising from the coarse punctures, short near base and becoming longer toward apex, apices separately rounded, not tuberculate, densely fringed with golden pubescence and setae. Legs slender, femora not clavate or pedunculate, finely pubescent with scattered suberect coarse setae. Abdomen dullish, finely punctate and pubescent, with scattered suberect hairs intermixed. Length 12 mm.

Holotype male, LAKE SAPATOZA REGION, CHIRIGUANA DISTRICT, COLOMBIA (C. Allen) in the British Museum (Natural History), London.

This species is very similar to *Cosmoplatidius sellatus* (White), but differs in the uniformly golden ochraceous coloration, finer punctation of the head and antennal scape, more feeble antennal spines, and less prominent, more acute mandibles. Superficially, it has a counterpart in *Deltosoma flavidum* Aurivillius, as is often the case among lycid-resembling Cerambycidae.

#### Genus CORYNELLUS Bates

Corynellus Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5:318.

This genus is readily distinguished by the abruptly clavate

and pedunculate intermediate and posterior femora. Although Bates considered the species to have the facies of gallerucids rather than lycids, they appear lyciform to me. Thus *C. mimulus* Bates suggests a small lycid such as *Lycus (Lycostomus) semiustus* Chevrolat, *Lycus angulatus* Gorham, or *Calopteron scapulare* Gorham, *C. ochraceus* an *Idiopteron*, such as *I. decipiens* Gorham, or *miniatum* Gorham. In any event, field studies will be necessary to determine if such resemblances reflect mimetic relationships.

Three species are known to me, and although one of these is South American it is included for the sake of completeness.

- Ochraceus, antennae, a triangular area on vertex and a broad median longitudinal band on pronotum black, femoral apices, tibiae, tarsi, and abdomen piceous; pronotum without scattered coarse punctures. 7 mm. Panama.....ochraceus Bates

#### Corynellus aureus Linsley, new species

Golden ochraceous, except antennae, tibiae, tarsi, sides of metathorax and margins of abdominal sternites which are piceous, pubescence golden except on antennae, tibiae and tarsi, where it is black. Head finely punctate above, shining impunctate and glabrous beneath; antennae reaching beyond middle of elytra, third to fifth segments cylindrical, densely clothed with long erect hairs internally and externally, although the fifth has fewer hairs externally; fifth segment a little longer than third, third segment a little longer than fourth, sixth to tenth segments, shorter, thicker, slightly produced externally but not serrate, sixth segment densely clothed with long hairs internally, sixth to tenth segments with a few long hairs externally at apex. Pronotum distinctly wider than long, broadly rounded, sublateral area densely clothed with appressed golden pubescence which is largely directed laterally or antero-laterally, disk and sides shining, subglabrous, with scattered coarse punctures, denser at middle of disk pro-, meso-, and metasterna shining, impunctate, glabrous. Elytra flaring slightly beyond the middle, very feebly costate, distinctly punctate, the basal punctures moderately coarse, mostly separated by about one diameter, becoming smaller and shallower beyond middle but evident to apex, pubescence very short, fine, golden, not obscuring surface; apices rounded to suture. Legs short, posterior femora falling far short of elytral apices, pedunculate, abruptly clavate beyond middle, polished and shining. Length 9.5 mm.

Holotype, female (?), LAKE SAPATOZA REGION, CHIRIGUANA DISTRICT, COLOMBIA, viii-ix, 1924 (C. Allen) in the British Museum (Natural History).

Although Corynellus aureus differs from the two previously described species in the form of the antennae, which resemble *Pteroplatus*, and the facies, which is more like *Elytroleptus*, it agrees well with them in general form and in the pedunculate and abruptly clavate femora. In coloration, *C. aureus* converges with *Cosmoplatidius ochraceus* Linsley, from the same region, suggesting the possibility that they may have the same model.

Genus PAREVANDER Aurivillius

Parevander Aurivillius, 1912, Coleopterorum Catalogus, 39:453.

This genus contains four closely related species, all confined to Mexico and Central America. They are large and subcylindrical but have the basic elements of lycid coloration, perhaps suggesting how lycid mimicry may have arisen in this group. The following key is designed to separate the known species.

## Key to the Species of Parevander

area. 15-24 mm. Southern Mexico and Guatemala.....nietoi (Guerin)
Scutellum with sides straight, apex liguliform; elytra with apices broadly black, rarely with a small circumscutellar black area.

17-24 mm. Nicaragua .....nobilis (Bates)

## Parathetesis Linsley, new genus

Form elongate, cylindrical, elytra fringed apically but not flaring. Head relatively small; antennal tubercles slightly elevated, quadrate; antennae with segments somewhat flattened and slightly expanded toward their apices, not carinate, not spinose, third segment distinctly larger than following. Pronotum trapezoidal, base nearly as wide as elytra, sides feebly tuberculate, disk with a callous behind middle; prosternum with intercoxal process feebly produced behind coxae, then narrowed and subacute, cavities open behind; mesosternum sloping in front and nearly plane, intermediate coxal cavities open to epimeron; metasternum with episterna moderately broad in front, gradually narrowed posteriorly. Scutellum triangular. Elytra tricostate, the costae most evident near middle, apices separately broadly rounded. Legs slender; femora sub-linear.

TYPE OF GENUS: Athetesis convergens Bates.

This genus differs from *Athetesis* and *Parevander* in the trapezoidal prothorax which is nearly as wide at the base as the elytra and has only a feeble lateral tubercle, and the form of the scutellum which is triangular (in *Athetesis* it is broad and suboval, in *Parevander* it is elongate and produced). From the latter it further differs in the shorter, more flattened antennae.

#### PARATHETESIS CONVERGENS (Bates)

Athetesis convergens Bates, 1892, Trans. Ent. Soc. London, 1892:171.

Somewhat rufo-testaceous, base of head, antennae, a longitudinal stripe on each side of pronotal disk, base of elytra except suture and margins, apices of elytra, sides of meso- and metasterna, trochanters, femoral apices broadly, tibiae and tarsi black. Head with some black hairs, denser near eyes; antennae slightly surpassing middle of elytra. Pronotum with disk coarsely punctate, thinly clothed with golden hairs, longitudinal stripes densely black pubescent. Elytra finely densely punctate and black pubescent in median yellow area. Femora finely densely punctate, thinly pubescent. Length 19 mm.

The type is from Amula, Guerrero, at 6,000 feet elevation. The coloration is lycid-like but the form is cylindrical, not flattened or explanate.

#### Pteroplatidius Linsley, new genus

Form flattened, elytra broadly explanate, flaring, densely fringed with long hair. Head moderate, front relatively short; antennae reaching to middle of elytra in the male, slightly shorter in the female, segments flattened and apically expanded, especially fifth to tenth, much more so in the female than in the male, first four segments clothed with long black hairs. Pronotum transverse, widest and subangulate at middle but base not distinctly constricted and net much narrower than base of elytra, sides without an oval impression; prosternum with intercoxal process expanded slightly behind coxae, then narrowed, cavities open behind; mesosternum sloping in front and nearly plane, intermediate coxal cavities open to epimera; metasternum with episterna moderately broad, narrowed slightly posteriorly. Scutellum subtriangular but apex not acute. Elytra with apical area quadricostate, the intercostal space coarsely, irregularly but more or less transversely reticulate, apices separately but narrowly rounded. Legs slender; femora feebly incrassate.

TYPE OF GENUS: Pteroplatus octocostatus Bates.

This genus is proposed for a species which superficially resembles *Elytroleptus* but differs markedly in the form of the prothorax which is not constricted at the base and lacks a lateral oval impression, and the much more explanate elytra which are densely fringed with long hair.

## PTEROPLATIDIUS OCTOCOSTATUS (Bates) (Fig. 2)

Pteroplatus octocostatus Bates, 1880, Biologia Centrali-Americana, Coleoptera, 5:73.

Elytroleptus octocostatus Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5:317.

Two examples, one of each sex, are before me, both from the state of Vera Cruz, Mexico. The male is from Cordoba (A. Fenyes, Calif. Acad. Sci.) and has yellowish elytra with the apical two-fifths or more, bluish-black. The female, from San Rafael, Jicaltepec, March 13, 1896 (F. C. Bowditch Coll., Mus. Comp. Zool.), in addition, has the basal two-fifths, except the humeri and epipleura blackish, but less so than the apex, the two dark areas narrowly connected along the suture. Whether these differences in color pattern, one *Lycus*-like, the other *Pteroplatus*-like, represent consistent differences between the sexes remains to be seen. Bates considered his type specimen, which is colored like the Cordoba male, to be a female. Length 11–14 mm.

## Genus PTEROPLATUS Buquet

Pteroplatus Buquet, 1840, Ann. Soc. Ent. France, 9:385.

This genus is principally South American, twelve species having been described from Columbia, others from Bolivia, Venezuela, and Argentina. The removal of several species to *Cosmoplatidius*<sup>4</sup> (see above) makes a more homogeneous group of the remaining species. The Central American form belongs to that section of the genus in which the elytra`are less flaring, their joint width at the greatest point being only about half of the length from base to apex.

#### PTEROPLATUS QUADRISCOPULATUS Bates

Pteroplatus guadriscopulatus Bates, 1880, Biologia Centrali-Americana, Coleoptera, 5:73.

Black or bluish-black; pronotum yellowish, with a median longitudinal black stripe and a lateral black stripe on each side; elytra yellowish with a broad black area over apices and often with a transverse ante-median black band, the two sometimes merging to leave only the humeri pale, or the anterior band reduced or forming a basal stripe along suture. Length 10-15 mm.

This species occurs in southern Mexico and Guatemala. No doubt a study of the habits would explain the extreme variability of the elytral color pattern, a variation which is also evident in its South American counterpart, *P. variabilis* Sallé.

Genus ELYTROLEPTUS Dugés

Elitroleptus Dugés, 1879, La Naturaleza Mexicana, 4:182.

## THE PAN-PACIFIC ENTOMOLOGIST [VOL. XXXVII, NO. ]

Elytroleptus Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5:317.

This genus is principally Mexican, a few species extending their range across the borders of southwestern United States and one occurring in eastern North America from eastern Texas and Florida to southern Canada. The adults join aggregations of particular species of lycids, to which they usually bear a remarkable resemblance in size, form, and coloration (figs. 3, 4).

## Key to the Species of Elytroleptus

	KEY TO THE SPECIES OF LLYTROLEPTUS
1.	Elytra bicolored or black
-	Elytra concolorous yellow or rufo-testaceous10
2(1).	Elytra with basal half or three-fourths yellow or rufo-testaceous,
	anterior margin of apical dark area arching to suture or
	more or less transverse
-	Elytra black or with ante-median and apical black areas or
	with anterior margin of apical dark area extending ob-
	liquely forward to suture5
3(2).	Pronotum thinly clothed with erect hairs which do not obscure
	the shining and very coarsely confluently punctate surface;
	elytra tricostate; smaller species, 7-10 mm
-	Pronotum largely clothed with appressed silky pubescence which
	obscures the surface, punctation moderately coarse; elytra
	quadricostate apically; large species, 12-17 mm. Western
	Texas to southern Arizona and northern Mexico (Chihua-
	hua, Durango)apicalis (LeConte)
4(3).	Elytra very coarsely deeply punctate, basal area with only about
	three rows of punctures between the costae, pubescence
	short and obscure, integument rufo-testaceous, apical fourth
	or fifth black, anterior margin of dark area transversely
	sinuate. 10 mm. Mexico (Queretaro, Hidalgo)
	dichromaticus Linsley, 9
-	Elytra moderately coarsely and shallowly punctate, basal area
	with five or six rows of punctures between the costae,
	pubescence long and conspicuous, integument lemon yellow,
	apical one-third black, anterior margin of dark area arched
	to the suture. 7-10 mm. Mexico (Sonora, Chihuahua, Sin-
	aloa, Morelos, Nayarit, Mexico, Guerrero)
5(2)	Electron and heller dilated from here and here a
5(2).	Elytra gradually dilated from base, quadricostate toward apex;
	large species, 13-15 mm. in length
_	
6(5).	small species, 7-11 mm. in length
•(•).	densely clothed with appressed golden tomentum except
	for an oval black area on posterior half of disk and another
	black area on each side behind lateral angle. 13 mm. Mex-
	ico (Oaxaca)
	too (ouxuou)

-	Elytra with humeral area and a broad median band yellowish-
	testaceous; pronotum with sides obtusely or broadly
	rounded, surface densely clothed with appressed golden
	tomentum except for median and lateral longitudinal black
	vittae. 15 mm. Mexico (Mexico and Vera Cruz)
	grandis Linsley
7(5).	Pronotal disk with a pair of yellow or red, finely punctate,
	densely pubescent, longitudinal bands on each side of mid-
	dle and a similar band along anterior margin and on each
	side at base8
_	Pronotal disk coarsely punctate and subglabrous, without
	finely punctate, pubescent bands9
8(7).	Pronotum with golden yellow bands; elytra strongly costate,
	pale areas distinct. 8-10 mm. Southeastern Canada to Flor-
	ida and eastern Texasfloridanus (LeConte)
-	Pronotum with red bands; elytra less strongly costate, pale
	areas reduced or absent in typical form, basal one-fourth
	reddish-yellow extending obliquely backward from sutural
	margin to side and along lateral margin to apex in var.
	obliquus. 7-10 mm. Western Texas (Davis and Chisos
	Mountains)immaculipennis Knull
9(7).	Elytra not more than three times as long as basal width, basal
	punctures as coarse as those of disk of pronotum, costae
	distinct throughout, integument pale yellow, dark area con-
	fined largely to apical half; pronotum ferrugineous, with
	an oval darker impression on each side; abdomen black or
	piceous; posterior tibiae, apex of intermediate tibiae, and
	tarsi black. 8-9 mm. Texas and northern Mexico (Ta-
	maulipas)divisus (LeConte)
-	Elytra nearly three and one-half times as long as basal width,
	basal punctures much less coarse than those of disk of pro-
	notum, costae distinct at base only, integument rufous or
	rufo-testaceous, dark area covering most of elytra except
	base and sides; pronotum rufous or piceous, without an
	oval impression at sides; abdomen rufo-testaceous, tarsi
	and all of the tibiae black. 6-11 mm. Northern Mexico
	(Chihuahua)humeralis Linsley
10(1).	Pronotum yellow or yellow-orange, if margined or clouded with
	black, disk predominantly yellow11
-	Pronotum black or with extensive black areas, mid-line of disk
	always black14
11(10)	. Head and pronotum yellow-orange, pronotum somtimes mar-
	gined with black or clouded with black, elytra yellow or
	yellow-orange12
-	Head and pronotum yellow, elytra reddish-yellow; ventral sur-
	face and legs largely brown. 8 mm. Western Texas (Davis
	Mountains) lineatus Knull

THE PAN-PACIFIC ENTOMOLOGIST [VOL. XXXVII, NO. ]

12(11). Elytra expanded apically, surface moderately to finely punctate, Elytra subparallel, each tricostate, the costae prominent; punctures coarse and distinct from base to apex, pubescence sparse; thoracic and abdominal sterna largely black or piceous. 8-11 mm. Central Mexico (Guanajuato, Mexico) (typical subspecies); western Texas to southern Arizona and Durango (subspecies davisi Knull).....luteus Dugés 13(12). Elytra tricostate throughout; elytral base, epipleura, and femora rather densely clothed with much longer erect and suberect hairs than remainder of elytra. 8-10 mm. Mexico (Mexico) ......pallidus villosus Linsley Elytra tricostate at base, quadricostate behind middle, the short costa less elevated; elytral base, epipleura and femora clothed with suberect hairs similar in length to those of remainder of elytra. 12-16 mm. Southern Arizona and northern Mexico (Chihuahua, Durango) .....ignitus LeConte Pronotum black, disk very coarsely punctate except for an irregular median smooth area at base and an ante-median tubercle on each side. 9 mm. Mexico (Queretaro)..... .....scabricollis Bates, var. 15(14). Pronotum with longitudinal yellow or reddish pubescent vittae Pronotum subglabrous, disk very coarsely, deeply punctate, ferrugineous with an oval black area at middle, sides depressed, black; elytra yellow, coarsely punctate, tricostate, innermost costa converging to suture near middle. 9 mm. Mexico (Queretaro, Hidalgo) .....dichromaticus Linsley, 3 16(15). Elytra dilated from in front of middle, disproportionately long, tricostate at base, quadricostate behind middle, the short costa less elevated; elytra reddish-yellow to fulvo-ochraceous 11-14 mm. Southern Arizona and New Mexico to Oaxaca, Mexico.....rusipennis (LeConte) Elytra gradually and moderately dilated posteriorly, tricostate throughout, yellow in male, yellow or rufo-testaceous in female. 8-10 mm. Mexico (Durango, Mexico, Zacatecas, Guanajuato, Jalisco) .....pallidus (Thomson)

ELYTROLEPTUS RUFIPENNIS (LeConte)

Pteroplatus rufipennis LeConte, 1884, Trans. Am. Ent. Soc., 12:23.
Elytroleptus longipennis Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5:318 (New Synonymy).

Elytroleptus eros Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5:318, pl. 21, fig. 3 (New Synonymy).

The above names apply to what appears to me to be a single species. The coloration of the elytra apparently varies

12

somewhat as in *E. pallidus* and the redder specimens are also subject to fading, judging by the types of *rufipennis* and *eros*.

## Elytroleptus dichromaticus Linsley, new species

## (Fig. 1)

Female: Head and prothorax rufo-testaceous, elytra lemon yellow with apices black, abdomen and femora and anterior tibiae, except bases and apices, pale rufo-testaceous, legs otherwise black, as are the antennae, a spot behind eye, anterior margin of prosternum, area surrounding anterior coxae, and a zigzag line from coxae to lateral margin and along margin posteriorly, mesosternum at middle, and metasternum. Head densely irregularly, moderately coarsely but shallowly punctate on upper frons and vertex, more finely punctate on lower frons; antennae not attaining middle of elytra, sulcate, coarsely punctate but shining, second, third and fourth segments shining, subcylindrical, remaining segments subopaque, heavier, fifth to tenth expanded at apex, subtriangular, serrate, fifth and sixth segments largest, sixth to eleventh abruptly decreasing in length. Pronotum subglabrous, a little wider than long, sides obtusely rounded, impressed above so as to give the effect of an elevated margin, disk flattened, very coarsely, closely punctate, more sparsely punctate sublaterally; prosternum almost impunctate in the concave antecoxal pale impression, confluently rugose in lateral black areas, meso- and metasterna finely punctate, thickly pubescent. Elytra relatively narrow, flaring slightly over apical half, tricostate, the costae distinct from base to apical dark area where they disappear, subparallel to one another but converging slightly toward the suture, surface shining except in apical dark area, very coarsely, closely punctate at base where there are only about three rows of punctures between the first two costae, becoming smaller posteriorly and increasing to about four rows near apical dark area, apical dark area covering between one-fifth and one-fourth of elytra, coarsely and very densely punctate, anterior margin transversely sinuate, apices narrowly separately rounded, not tuberculate, fringed with black hair. Abdomen with a few scattered coarse punctures and scattered long suberect hairs. Legs slender, femora sparsely punctate, sparsely pubescent. Length 10.3 mm.

*Male:* Sides of head, pronotal margins and center of disk black, elytra lemon yellow without an apical dark area, thoracic and abdominal sterna black. Length 9 mm.

Holotype female and allotype male (California Insect Survey, on deposit in California Academy of Sciences) from QUERETARO, QUERETARO, MEXICO, June 28, 1952 (E. E. Gilbert and C. D. MacNeill). A female specimen from Zimapan, Hidalgo, Mexico, June 11–14, 1951, taken on flowers of Eysenhardtia polystachys Ort. by P. D. Hurd differs slightly from the types in that the ground color of the elytra is somewhat rufo-testaceous rather than lemon yellow.

This species is very distinct in the flat, subglabrous, coarsely punctate pronotum. It is also remarkably dichromatic with regard to the elytral pattern, the male elytra being concolorous, the female having black-tipped elytra. However, a male example of E. scabricollis Bates, taken in the company of a female with black-tipped elytra, also has the elytra concolorous yellow, although the males that I have seen from other localities are marked like the female.

#### Elytroleptus humeralis Linsley, new species

Male: Head, except vertex which is rufous, pro-, meso-, and metathorax, and antennae black, trochanters, femoral apices, tibiae, tarsi and scutellum black, dark area of elytra black with vaguely violaceous caste; pubescence long, erect, golden, except on elytra where it is short and antennae where it is black. Head densely and somewhat rugosely punctate on vertex, the punctures coarse but variable in size, area behind eyes rugose; antennae attaining middle of elytra, scape coarsely punctate but shining, segments two to four shining, slender, segments four to eleven subopaque, expanded apically, serrate, eleventh segment emarginate and more or less appendiculate. Pronotum a little wider than long, sides obtusely rounded but wider anteriorly, being narrowed toward base from just behind middle, lateral margin convex, feebly elevated, disk very coarsely somewhat confluently punctate, the punctures becoming smaller laterally but also dense; prosternum finely punctate, the punctures very dense at sides, meso- and metasternum, finely punctate, more densely so at sides. Elytra nearly three and one-half times as long as basal width, sides scarcely flaring apically, costae distinct over basal pale area, becoming narrower and inconspicuous over dark area, basal punctures much less coarse than those of disk of pronotum, pubescence short, obscure, anterior margin of apical dark area extending obliquely forward and reaching to basal one-fifth or one-sixth at suture, apices conjointly rounded, fringed with moderately short black hairs, not tuberculate. Abdomen coarsely not densely punctate, thinly clothed with long suberect hairs. Legs slender; femora punctate and thinly clothed with suberect hairs. Length 9.3 mm.

*Female:* Head and prothorax rufous, mesosternum and metasternum medially more or less rufo-testaceous; antennae extending over about basal one-third of elytra. Length 11.5 mm.

Holotype male, allotype female, and twenty paratypes (1433, 699) from SALAICES, CHIHUAHUA, MEXICO, July 23, 1947 (H. Spieth, David Rockfeller Expedition, American Museum of Natural History) (two paratypes have been deposited in the California Insect Survey, University of California). Additional material in the collection of the American Museum of Natural History (David Rockefeller Expedition) is as follows: 233, 1947, 1947, 1947 (M. A. Cazier, W. J. Gertsch, H. Spieth) and 133, 422 miles southwest of Camargo, 4,900 feet elevation, July 15, 1947 (M. A. Cazier).

This species is apparently related to E. divisus LeConte, but differs in the more elongate elytra with the pale area reduced largely to the humeral and lateral areas and bright rufo-testaceous rather than yellow and the basal area much less coarsely punctate than the pronotum. The two also differ in other details of color, the abdomen being black or piceous in E. divisus and only the posterior tibiae and apex of the intermediate tibiae are black.

Elytroleptus pallidus villosus Linsley, new subspecies

Similar in size and form to E. pallidus pallidus Thomson but differing in the very long, erect, flying hairs of the elytral epipleura and femora.

Holotype male, allotype female, and two paratypes, one of each sex, from Bejucos, Temescaltepec, Mexico, July 5, 1933 (H. E. Hinton and R. L. Usinger) (Calif. Acad. Sciences). An additional paratype, taken by the same collectors, is from Tejupilco, Temescaltepec, July 1933 (Calif. Acad. Sci.).

#### HOLOPLEURA MARGINATA LeConte

Holopleura marginata LeConte, 1873, Smithsonian Misc. Coll., 11(264):194. Holopleura Helena LeConte, 1873, Smithsonian Misc. Coll., 11(264):194.

This species occurs from British Columbia to California. It is extremely variable in color and size. The basic coloration is black with the head, pronotum and elytra coccineus with variably extensive black markings. The female is the more reddish of the two sexes, the dark areas of the elytra often being reduced to a broad discal band or an oblique bar at basal one-third and a lateral dot at apical one-third.

## SEDIS INCERTAE

#### "PTEROPLATUS" METALLICUS Nonfried

Pteroplatus metallicus Nonfried, 1894, Ent. Nachr., 20:140. Elytroleptus metallicus, Aurivillius, 1912, Coleopterorum Catalogus, 39:456.

I have not been able to apply this name to any of the material available for study. Judging from the original description, the species involved does not appear to be *Pteroplatus*, where it was placed by its author, nor *Elytroleptus*, where it was assigned by Aurivillius. Proper interpretation may have to await a reexamination of the type specimen, which is from Central Honduras.